

IN THE CLAIMS:

Please amend claims 26, 41, and 50-54 as follows.

Claims 1-25. (Cancelled).

26. (Currently Amended) A method, comprising:

obtaining a current connection state as well as a current load state of each of a plurality of processors configured to perform communication in a packet switched connection ~~from a data storage~~;

selecting on a per packet basis, by a load balancer configured to distribute load to said a processors, a processor in such a manner that a respective next packet is distributed to one of said processors having a lowest load irrespective of a specific connection to which this next packet belongs; ~~and~~

maintaining information about the load state of each processor so that said selecting is performed by selecting one of said processors to serve and process a respective packet based on the load state; and

informing the current connection state to respective processors comprising inserting data indicating the current connection state into a packet to be distributed.

27. (Previously Presented) A method according to claim 26, wherein said data storage is accessed by said load balancer.

28. (Previously Presented) A method according to claim 26, wherein said data storage is accessed by said processors.

29. (Previously Presented) A method according to claim 26, wherein said information about the load state is maintained as a Boolean state.

30. (Previously Presented) A method according to claim 26, wherein a processor is selected in a round-robin fashion.

31. (Previously Presented) A method according to claim 26, wherein a supported service profile for each processor is maintained.

32. (Previously Presented) A method according to claim 31; wherein said supported service profile is used as additional selection criteria.

33. (Previously Presented) A method according to claim 26, wherein said load balancer is configured to obtain a load state from each processor upon a hardware based mechanism.

34. (Previously Presented) A method according to claim 26, wherein said load balancer is configured to obtain a load state from each processor upon a packet based mechanism.

35. (Previously Presented) A method according to claim 34, wherein a load state of a processor is inserted into a packet processed by said processor.

36. (Previously Presented) A method according to claim 34, wherein a packet returned by a processor is interpreted as a flag for a free resource.

37. (Previously Presented) A method according to claim 26, wherein excess traffic is redirected to another load balancer, said excess traffic being defined upon the number of active processors.

Claims 38-40. (Cancelled)

41. (Currently Amended) An apparatus, comprising:

~~— storage configured to maintain a load state of each of a plurality of processors configured to perform communication in a packet switched connection; and~~

selection circuitry configured to select on a per packet basis, one of a plurality of processors configured to perform communication in a packet switched connection on the basis of its a stored load state of the selected processor in such a manner that a respective next packet is distributed to the selected processor has a lowest load among said processors irrespective of a specific connection to which this next packet belongs; and

connection state informing circuitry configured to inform the current connection state to respective processors comprising inserting data indicating the current connection state into a packet to be distributed.

42. (Previously Presented) An apparatus according to claim 41, wherein a load state of a processor is contained in a table.

43. (Previously Presented) An apparatus according to claim 41, wherein a load state of a processor is expressed as a Boolean value.

44. (Previously Presented) An apparatus according to claim 41, wherein a load state of a processor is expressed as value which corresponds to the percentage of load.

45. (Previously Presented) An apparatus according to claim 41, wherein said selection circuitry is configured such that a processor is selected also on the basis of a parameter indicating the service profile supported by a respective processor.

46. (Previously Presented) An apparatus according to claim 45, wherein said parameter is contained in a table.

47. (Previously Presented) An apparatus according to claim 41, further comprising

data insertion circuitry configured to insert a communication connection state into a packet to be routed.

48. (Previously Presented) An apparatus according to claim 41, wherein the processors are comprised of multicore digital signal processing elements having a shared data storage for all cores, whereby said device comprises a first level of load balancing for selecting a digital signal processing means and a second level of load balancing for selecting a single core.

49. (Previously Presented) An apparatus according to claim 41, further comprising

a switch configured to redirect excess traffic to another apparatus, wherein said excess traffic is defined upon the number of active processors.

50. (Currently Amended) A system comprising:
an obtaining unit configured to obtain a current connection state as well as a current load state of each of a plurality of processors, configured to perform communication in a packet switched connection ~~from data storage;~~

a selector configured to select on a per packet basis one of said processors, by a load balancer configured to distribute load to said processors in such a manner that a respective next packet is distributed to the selected processor has a lowest load irrespective of a specific connection to which this next packet belongs; and

a maintenance unit configured to maintain information about the load state of each processor so that said selecting comprises selecting one of said processors to serve and process a respective packet based on the load states; and
an informing configured to inform the current connection state to respective processors comprising inserting data indicating the current connection state into a packet to be distributed.

51. (Currently Amended) A computer program embodied on a computer readable medium, the computer readable medium storing code comprising computer executable instructions configured to perform a method comprising:

obtaining a current connection state as well as a current load state of each of a plurality of processors configured to perform communication in a packet switched connection ~~from said data storage;~~

selecting on a per packet basis, by a load balancer configured to distribute load to said processors, one of said processors in such a manner that a respective next packet is distributed to said selected one of said processors has a lowest load irrespective of a specific connection to which a respective packet belongs; ~~and~~

maintain information about the load state of each processor so that said selecting comprises selecting one of said processors to serve and process a respective packet based on the load state; and

informing the current connection state to respective processors comprising inserting data indicating the current connection state into a packet to be distributed.

52. (Currently Amended) A system comprising
a plurality of processors for performing communication in a packet switched
connection; and

at least one load balancer configured to distribute distributing the load to said
processors; ~~and~~

~~— a data storage,~~

wherein the load balancer is configured to:

obtain a stored current connection state and a current load state of each of said
processors ~~from said data storage,~~

maintain information about the load state of each of said processors, ~~and~~

select a processor in such a manner that a respective next packet is distributed to
the processor having a lowest load irrespective of a specific connection to which a
respective packet belongs by selecting one of the processors to serve and process a
respective packet based on the load state, and

inform the current connection state to respective processors comprising inserting
data indicating the current connection state into a packet to be distributed.

53. (Currently Amended) An apparatus, comprising:

a load balancer, wherein the load balancer is configured to:

obtain a current connection state and a current load state of each of a
plurality of processors ;

maintain information about the load state of each of said processors; and
select a processor on a per packet basis in such a manner that a respective next packet is distributed to a processor having a lowest load irrespective of a specific connection to which this next respective packet belongs by selecting one of the processors to serve and process a respective packet based on the load state of the selected processor.

54. (Currently Amended) An apparatus, comprising:
maintaining means for maintaining a load state of each of multiple processors performing a packet switched communication connection; ~~and~~
selecting means for selecting, on a per packet basis, one of the processors on the basis of its load state in such a manner that a respective next packet is distributed to a processor having a lowest load irrespective of a specific connection to which a respective packet belongs; and
informing means for information the current connection state to respective processors by inserting data indicating the current connection state into a packet to be distributed.

55. (Previously Presented) An apparatus according to claim 54, further comprising
means for inserting a communication connection state into a packet to be routed.

56. (Previously Presented) An apparatus according to claim 54, further comprising

means for redirecting excess traffic to another device, wherein said excess traffic is defined upon the number of active processors.